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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/722,621	11/28/2000	Ken Kumakura	122.1424	5939
21171	7590	12/13/2005	EXAMINER	
STAAS & HALSEY LLP			WU, XIAO MIN	
SUITE 700			ART UNIT	
1201 NEW YORK AVENUE, N.W.			PAPER NUMBER	
WASHINGTON, DC 20005			2674	

DATE MAILED: 12/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/722,621

Applicant(s)

KUMAKURA ET AL.

Examiner

XIAO M. WU

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 September 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19,22-34,37,38,40-49 and 51-54 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19,22-34,37,38,40-49 and 51-54 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
3. Claims 1-19, 22-34, 37-38, 40-49, 51-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nagakubo (US Patent No. 5,757,343) in view of Tsuchida (US Patent No. 6,304,238)

As to claims 1, 17, 26, 40, Nagakubo discloses a display apparatus for displaying a color image, comprising: a detection portion detecting number of emissions or intensity of the emissions, of input primary color video signals (e.g. detecting the luminance mode 1 to mode 4 as shown in Fig. 2); adjusting amplitudes of the input primary color video signals in accordance with the detected number of emissions or the detected intensity of the emissions (see Figs. 6 and 7). It is noted that Nagakubo does not specifically disclose that the gain adjusting circuit

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including a white balance adjusting section. Tsuchida is cited to teach a plasma device including a white balance adjusting section. It would have been obvious to one of ordinary skill in the art to have modified Nagakubo's gain adjusting circuit with the features of the white balance adjusting circuit as taught by Tsuchida so as to maintain a good color balance.

As to claims 2, 31, 41, Nagakubo discloses the detection portion detects the intensity from a display ratio of an image produced by the primary color video signals (see Fig. 2).

As to claims 3, 8, 42, Nagakubo discloses a control portion (Fig. 6) controlling the intensity from a display ratio of an image produced by the primary color video signals.

As to claims 4, 9, 14, 15, 27, 29, Tsuchida discloses the white balance correction portion and Nagakubo discloses a computing unit (5, Fig. 1) and a plurality of multipliers (see Fig. 6 of Nagakubo).

As to claims 5, 6, 10, 11, 16, 22, 28, 30, 37, Nagakubo discloses a storage unit (3, Fig. 4).

As to claims 7, 32, 43, 44, Nagakubo discloses detecting the display current (e.g. total number of times of light emission, see Fig. 2).

As to claims 12, 13, 33, 45, 46, Nagakubo discloses detection portion detects the intensity from an external applied luminance adjusting input ((22, Fig. 4).

As to claim 18 and 25, Nagakubo discloses the display is a plasma display.

As to claims 19, 24, 34, 47, 48, 50-52, Nagakubo discloses output gray levels (R', G', B', Fig. 1) of images represented by the primary color video signals are adjusted in accordance with input gray levels (R, G, B, Fig. 6) of the image represented by the primary color video signals, thereby correcting the color balance which varies the intensity of the primary color video signals, wherein the display comprises: a first detection portion detecting the input gray levels of the

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image represented by the primary color video signals (e.g. detecting the luminance model to mode 4 as shown in Fig. 2). It is noted that Nagakubo does not specifically disclose that the gain adjusting circuit including a white balance adjusting section. Tsuchida is cited to teach a plasma device including a white balance adjusting section. It would have been obvious to one of ordinary skill in the art to have modified Nagakubo's gain adjusting circuit with the features of the white balance adjusting circuit as taught by Tsuchida so as to maintain a good color balance.

As to claims 23, 38, 49, Nagakubo discloses a second detection portion detecting a display ratio (e.g. different modes I-IV) with different ratios).

As to claims 53, 54, Nagakubo further discloses that the amplitude ratio between the primary color video signals is set in accordance with the intensity of the primary color video signals (Figs. 6 and 7).

### ***Response to Arguments***

4. Applicant's arguments filed 9/20/2005 have been fully considered but they are not persuasive. Applicant argues that Nagakubo does not disclose "correcting white balance by adjusting amplitudes of said input color video signal in accordance with said detected number of emission or said detected intensity of the emissions" as required in claims, and Tsuchida's white balance adjusting as shown in Figs. 1 and 20 is not based upon "number of emissions or said detected intensity of emissions, of input primary color video signals". These arguments are not persuasive. It is noted that Nagakubo clearly discloses adjusting amplitudes of the input primary color video signals in accordance with the number of emissions (see Figs. 3A-3D, 6-9) and Tsuchida clearly suggest that it is known in the art that the color input signal (red, green blue) are subject to a white balance process in a white balance regulating section (26, Fig. 1). Thus, it

would have been obvious to one of ordinary skill in the art to have included a white balance adjusting circuit of Tsuchida for the driving circuit of Nagakubo so that all the color input signal are subject to a white balance process to achieve a better color display.

***Conclusion***

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to XIAO M. WU whose telephone number is 571-272-7761. The examiner can normally be reached on 6:30 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, PATRICK EDOUARD, can be reached on 571-272-7603. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

X.W.  
December 10, 2005



**XIAO M. WU**  
**Primary Examiner**  
**Art Unit 2674**